MP

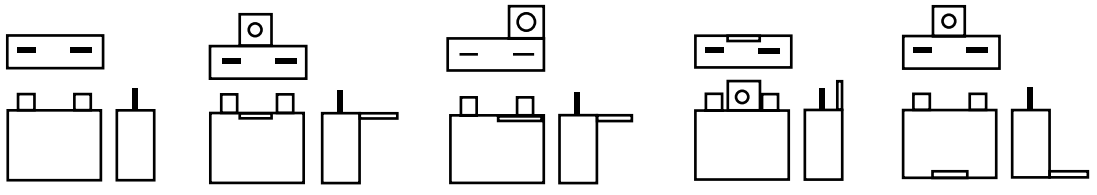
Metallized Polypropylene Motor Run/AC Film Capacitors In Boxes

APPLICATIONS

- *Motor Run*
- *General Purpose AC*
- *UL/CSA 810 approved*
- *Motor Speed Controls*
- *Switching capacitor for industrial controls*

SPECIFICATIONS

Operating Temperature Range		**-40°C to +85°C (UL P2, EN60252 VDE P0 class C) -40°C to +105°C**						
Capacitance Tolerance		**±10% at 1kHz, 20°C ±5%, +10%/-5% optional**						
AC Voltage	**VAC**	**250**	**350**	**400**	**450**	**500**	**600**	
		Note VAC must be de-rated by 1.25% per °C exceeding 85°C						
Dissipation Factor (tan d) at 1kHz and 20°C		**Freq**	**C≤2.2uF**	**2.2uF<C≤15uF**	**15uF<C≤22uF**	**C>22uF**		
		1 kHz	.0006	.001	.0012	.0014		
		0.001 Max at 1 kHz and 20°C for safety mechanism capacitors						
Insulation Resistance @20°C (<70% RH)for 1 minute at 100VDC applied		**1000MΩxμF**						
Dielectric Strength		**Terminal to Terminal**			**Terminal to Case (EN60252-1)**			
		160% VAC for 60 Seconds and 20°C applied between terminals (200% VAC for EN 60252-1)			3KV at 60Hz for 60 Seconds applied between terminals and case			
Load Life		125% of rated VAC at 85°C & 105°C						
		6000 hours for class A (30000 hours of continuous service life) 2000 hours for class B (10000 hours of continuous service life) 600 hours for class C (3000 hours of continuous service life)						
Construction		Metallized Polypropylene film Segmented Metallized Polypropylene film(safety Mechanism capacitors)						
Electrodes		Vacuum deposited metal layers						
Coating		Solvent resistant plastic case (UL 94V-0) with epoxy end fill (UL 94V-0)						
Certification		UL E311560						



1 2 3 4 5

Additional mounting tabs styles and lead terminations available.
Contact Illinois Capacitor, Inc. for details.

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PHYSICAL DIMENSIONS

VAC / (µF)	250	350	400	450	500	600
1	32x18x10	32x20x10	38x24x12	38x26x14	38x28x17	38x30x20
3	32x27x16	32x28x18	48x31x19	38x35x26	48x35x24	48x40x30
5	38x30x18	38x33x22	48x35x25	48x38x29	48x40x30	58x45x34
7	38x33x21	38x37x26	48x40x30	48x45x34	58x45x32	68x45x35
10	38x38x27	48x36x25	58x45x34			
15	48x37x26	48x40x29	68x47x35			
20	51x38x30	58x40x28	60x50x38			
25	58x40x30	58x43x32	68x55x44			
30	68x40x30	68x43x31				
35	→	68x45x33				
40	→	68x48x36				

Convert to inches divide by 25.4

LxHxT (mm)

***Customized capacitors available upon request.**
Contact Illinois Capacitor Inc. for details.

STANDARD PART LISTING

Capacitance (µF)	VAC	PART NUMBER	LxHxT (mm)
1	250	**105MP#250K##**	32x18x10
1	350	**105MP#350K##**	32x20x10
1	400	**105MP#400K##**	38x24x12
1	450	**105MP#450K##**	38x26x14
1	500	**105MP#500K##**	38x28x17
1	600	**105MP#600K##**	38x30x20
3	250	**305MP#250K##**	32x27x16
3	350	**305MP#350K##**	32x28x18
3	400	**305MP#400K##**	48x31x19
3	450	**305MP#450K##**	38x35x26
3	500	**305MP#500K##**	48x35x24
3	600	**305MP#600K##**	48x40x30
5	250	**505MP#250K##**	38x30x18
5	350	**505MP#350K##**	38x33x22
5	400	**505MP#400K##**	48x35x25
5	450	**505MP#450K##**	48x38x29
5	500	**505MP#500K##**	48x40x30
5	600	**505MP#600K##**	58x45x34
7	250	**705MP#250K##**	38x33x21
7	350	**705MP#350K##**	38x37x26

Capacitance (µF)	VAC	PART NUMBER	LxHxT (mm)
7	400	**705MP#400K##**	48x40x30
7	450	**705MP#450K##**	48x45x34
7	500	**705MP#500K##**	58x45x32
7	600	**705MP#600K##**	68x45x35
10	250	**106MP#250K##**	38x38x27
10	350	**106MP#350K##**	48x36x25
10	400	**106MP#400K##**	58x45x34
15	250	**156MP#250K##**	48x37x26
15	350	**156MP#350K##**	48x40x29
15	400	**156MP#400K##**	68x47x35
20	250	**206MP#250K##**	51x38x30
20	350	**206MP#350K##**	58x40x28
20	400	**206MP#400K##**	58x40x28
25	250	**256MP#250K##**	58x40x30
25	350	**256MP#350K##**	58x43x32
25	400	**256MP#400K##**	68x55x44
30	250	**306MP#250K##**	68x40x30
30	350	**306MP#350K##**	68x43x31
35	350	**356MP#350K##**	68x45x33
40	350	**406MP#350K##**	68x48x36

 # replace with mounting tab style designation (1 to 5)
to be assigned by Illinois Capacitor, Inc.

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Safety Mechanism Capacitors
UL 810
Class P2

µF \ VAC	250	400	450
1	32x20x11	38x22x12	38x24x12
3	32x35x14	38x30x20	48x28x18
5	38x26x16	38x35x27	48x34x24
7	38x30x20	48x36x27	48x40x30
8	38x30x21	48x40x28	

Convert to inches divide by 25.4 — **LxHxT (mm)**

Additional case sizes and capacitance values available. Contact Illinois Capacitor, Inc. for details.

Capacitance (µF)	VAC	IC PART NUMBER	LxHxT (mm)
1	250	**105MP#250K2##**	32x20x11
1	400	**105MP#400K2##**	38x22x12
1	450	**105MP#450K2##**	38x24x12
3	250	**305MP#250K2##**	32x35x14
3	400	**305MP#400K2##**	38x30x20
3	450	**305MP#450K2##**	48x28x18
5	250	**505MP#250K2##**	38x26x16

Capacitance (µF)	VAC	IC PART NUMBER	LxHxT (mm)
5	400	**505MP#400K2##**	38x35x27
5	450	**505MP#450K2##**	48x34x24
7	250	**705MP#250K2##**	38x30x20
7	400	**705MP#400K2##**	48x36x27
7	450	**705MP#450K2##**	48x40x30
8	250	**805MP#250K2##**	38x30x21
8	400	**805MP#400K2##**	48x40x28

EN 60252-1
VDE P0 Class C

µF \ VAC	400	450
1	38x24x12	38x26x14
3	38x34x23	38x35x26
5	48x36x24	48x39x28
7	48x40x30	48x45x34

Convert to inches divide by 25.4 — **LxHxT (mm)**

Capacitance (µF)	VAC	IC PART NUMBER	LxHxT (mm)
1	400	**105MP#400KP0##**	38x24x12
1	450	**105MP#450KP0##**	38x26x14
3	400	**305MP#400KP0##**	38x34x23
3	450	**305MP#450KP0##**	38x35x26

Capacitance (µF)	VAC	IC PART NUMBER	LxHxT (mm)
5	400	**505MP#400KP0##**	48x36x24
5	450	**505MP#450KP0##**	48x39x28
7	400	**705MP#400KP0##**	48x40x30
7	450	**705MP#450KP0##**	48x45x34

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